

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for ALPHA-PHELLANDRENE

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Abies alba</i>	Leaf	5.0	7.0	-0.30935714579220713	--
<i>Abies balsamea</i>	Plant				--
<i>Achillea millefolium</i>	Leaf				--
<i>Acinos alpinus</i>	Shoot		18.0	-0.26364091553399255	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of <i>Acinus alpinus</i> (L.) Moench ssp. <i>meridionalis</i> (Nyman). P.W. Ball Growing in Spain. <i>Flav. & Frag. J.</i> 8:127-130.)
<i>Acinos alpinus</i>	Shoot		18.0	-0.26364091553399255	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of <i>Acinus alpinus</i> (L.) Moench ssp. <i>meridionalis</i> (Nyman). P.W. Ball Growing in Spain. <i>Flav. & Frag. J.</i> 8:127-130.)
<i>Agathosma betulina</i>	Leaf Essent. Oil				--
<i>Allium sativum</i> var. <i>sativum</i>	Bulb				Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
<i>Anethum graveolens</i>	Seed	125.0	7469.0	1.5339306210630879	--
<i>Anethum graveolens</i>	Shoot Essent. Oil	248800.0	525100.0	1.4141949197576593	--
<i>Anethum graveolens</i>	Root Essent. Oil				--
<i>Anethum graveolens</i>	Leaf	20.0	8025.0	5.376830730634647	--
<i>Anethum graveolens</i>	Essential Oil				--
<i>Anethum graveolens</i>	Seed Essent. Oil				--
<i>Angelica archangelica</i>	Seed Essent. Oil				--
<i>Angelica archangelica</i>	Fruit				--
<i>Angelica archangelica</i>	Leaf Essent. Oil		678000.0	1.751978121762097	--
<i>Angelica archangelica</i>	Root				--
<i>Angelica archangelica</i>	Root Essent. Oil		225000.0		--
<i>Apium graveolens</i>	Fruit		2000.0	0.431635886715178	--
<i>Apium graveolens</i>	Seed Essent. Oil		2000.0	-0.8573553114168811	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Artemisia dracunculus</i>	Essential Oil				--
<i>Artemisia dracunculus</i>	Plant				--
<i>Artemisia dracunculus</i>	Leaf Essent. Oil				--
<i>Boswellia serrata</i>	Resin, Exudate, Sap				Sabinsa: A series of well documented proprietary PR booklets, e.g.Sabinsa Corps. 1998. Bronchial Asthma - Its etiology and control with traditional herbal extracts. Sabinsa Corporation. Piscataway, NJ. 49 pp.
<i>Boswellia sacra</i>	Essential Oil		24000.0	-0.1285055418541296	--
<i>Boswellia sacra</i>	Resin, Exudate, Sap		0.6		Chiavari, G., Galletti, G. C., Piccaglia, R., Mohamud, M. A. 1991. Differentiation Between Resins <i>Boswellia carterii</i> and <i>Boswellia frereana</i> (Frankincense) of Somali Origin. J. Essent. Oil Res. 3 (3):185-186.
<i>Canarium indicum</i>	Essential Oil	15100.0	37750.0	0.1376349678224283	--
<i>Capsicum frutescens</i>	Fruit				--
<i>Capsicum annum</i>	Fruit				--
<i>Carica papaya</i>	Fruit				--
<i>Carthamus tinctorius</i>	Leaf		0.01	-0.3143142988548442	--
<i>Carthamus tinctorius</i>	Bud		0.01		--
<i>Carum carvi</i>	Seed	3.0	1230.0	-0.5312072630899651	--
<i>Carum carvi</i>	Fruit	3.0	6.0	-0.5736201696885931	--
<i>Cinnamomum verum</i>	Bark Essent. Oil				--
<i>Cinnamomum verum</i>	Root Bark				--
<i>Cinnamomum camphora</i>	Leaf		5.0	-0.3107755014610589	--
<i>Cinnamomum verum</i>	Leaf Essent. Oil				--
<i>Cinnamomum verum</i>	Stem Bark				--
<i>Cinnamomum verum</i>	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Cistus ladaniferus</i>	Plant	3.0	210.0	0.294035494982487	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus reticulata	Fruit	5.0	6.0	-0.5736201696885931	--
Citrus paradisi	Pericarp	1.0	2.0		--
Citrus aurantiifolia	Fruit		20.0	-0.5665622033948856	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Essential Oil		20.0	-0.5926545907300464	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Petiole		2.0		--
Citrus sinensis	Fruit	12.0	14.0	-0.5695870460921888	--
Citrus aurantium	Leaf	1.0	20.0	-0.3001378339446704	--
Cleonia lusitanica	Leaf	1.0	2.0	-0.31290303496433663	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.
Coleus barbatus	Stem Essent. Oil		94300.0		Jim Duke's personal files.
Coleus barbatus	Leaf Essent. Oil		94300.0	-0.49783406126367846	Jim Duke's personal files.
Coriandrum sativum	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Coriandrum sativum	Essential Oil				--
Coridotherymus capitatus	Shoot		22.0	-0.2534837649460229	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. Z. Lebensm Unters Forsch 197: 20-23.
Cuminum cyminum	Seed		60.0	-0.9184826797367149	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cuminum cyminum	Fruit		60.0	-0.5463965854128641	--
Cuminum cyminum	Seed Essent. Oil		8400.0	0.7805772238273097	--
Curcuma xanthorrhiza	Rhizome				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Curcuma longa	Rhizome		1945.0	1.0	--
Curcuma longa	Leaf		2325.0	1.3345170744070258	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cymbopogon nardus	Plant	24.0	96.0	-0.500476583525581	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Daucus carota	Root				--
Elettaria cardamomum	Fruit				Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Elsholtzia polystachya	Leaf		0.0	-0.3143213906331884	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from Elsholtzia polystachya from Two Different Locations in India. <i>Planta Medica</i> 58: 376-379.
Elsholtzia polystachya	Leaf		2.4	-0.3126193638305662	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from Elsholtzia polystachya from Two Different Locations in India. <i>Planta Medica</i> 58: 376-379.
Eucalyptus erythrandra	Leaf		7.0	-0.30935714579220713	Bignell,C.M.,Dunlop,P.J.,Brophy,J. J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus tetraptera	Leaf		110.0	-0.23631182884633958	Bignell,C.M.,Dunlop,P.J.,Brophy,J. J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus intertexta	Leaf		5.5	-0.31042091254384596	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
Eucalyptus dealbata	Shoot		695.0	1.4554568214798744	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus sp	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Eucalyptus largisparsa	Leaf		4.6	-0.31105917259482935	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
Eucalyptus sideroxylon	Shoot		530.0	1.0364743597261254	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus sparsa	Leaf		1555.0	0.7884501418990839	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
Eucalyptus cladocalyx	Shoot		80.0	-0.10620508142046267	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus camaldulensis	Shoot		225.0	0.261991627393438	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus punctata	Shoot		125.0	0.008062862694196265	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus occidentalis	Shoot		0.1	-0.3090941644151568	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus globulus	Leaf Essent. Oil	1000.0	343000.0	0.46075475134298666	--
Eucalyptus maidenii	Shoot		45.0	-0.1950801490651973	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus viridis	Leaf	0.0	0.5	-0.31396680171597546	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus blakelyi	Shoot		40.0	-0.20777658730015938	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus porosa	Leaf		865.0	0.29911743614521386	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus angulosa	Leaf		3.0	-0.3121938571299107	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus globulus	Shoot		3000.0	7.3085148477973965	--
Eucalyptus dolichorhyncha	Leaf		105.0	-0.23985771801846906	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus tereticornis	Shoot		25.0	-0.24586590200504566	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus behriana	Leaf		2.7	-0.31240661048023843	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus siderophloia	Shoot		11.0	-0.2814159290629395	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus populnea	Leaf		1.8	-0.3130448705312218	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus citriodora	Shoot		0.1	-0.3090941644151568	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus brassiana	Leaf		0.0	-0.3143213906331884	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Chemical Constituents of the Leaf Essential Oil of Eucalyptus brassiana S. T. Blake. Journal of Essential Oil Res. 3: 45-7.
Eucalyptus polyanthemos	Shoot		365.0	0.6174918979723765	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus globulus	Essential Oil		1000.0	-0.5736860307676445	--
Eucalyptus moluccana	Shoot		0.1	-0.3090941644151568	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus citriodora	Leaf Essent. Oil		1000.0	-0.8574494059207024	--
Eucalyptus leucoxylon	Leaf		22.0	-0.29871947827581863	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus maculata	Shoot		30.0	-0.23316946377008357	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus desquamata	Leaf	0.0	15.0	-0.3036837231167999	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus astringens	Shoot		0.1	-0.3090941644151568	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus ochrophloia	Leaf		0.5	-0.31396680171597546	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus albens	Shoot		25.0	-0.24586590200504566	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus forrestiana	Leaf		285.0	-0.11220570782180732	Bignell,C.M.,Dunlop,P.J.,Brophy,J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus diversicolor	Shoot		25.0	-0.24586590200504566	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus stoatei	Leaf		21.0	-0.29942865611024455	Bignell,C.M.,Dunlop,P.J.,Brophy,J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus cuprea	Leaf		6.4	-0.3097826524928626	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus saligna	Shoot		12.0	-0.2788766414159471	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus ceratocorys	Leaf		6.0	-0.310066323626633	Bignell,C.M.,Dunlop,P.J.,Brophy,J. J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus botryoides	Shoot		0.1	-0.3090941644151568	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus oviformis	Shoot		180.0	0.14772368327877924	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus globulus	Fruit Essent. Oil		83000.0	0.7081332746915394	--
Eucalyptus melanophloia	Leaf		80.0	-0.2575871638791165	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus melliodora	Shoot		170.0	0.12233080680885507	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus fasciculosa	Leaf		22.0	-0.29871947827581863	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus bosistoana	Shoot		120.0	-0.004633575540765823	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus incrassata	Leaf		205.0	-0.1689399345758792	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus odorata	Leaf		4.4	-0.3112010081617144	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus globulus	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Eupatorium triplinerve	Plant		535.0	2.5590918591502247	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ferula assa-foetida	Essential Oil				--
Foeniculum vulgare	Essential Oil	1000.0	198000.0	3.2393816351437663	Jim Duke's personal files.
Foeniculum vulgare	Plant		135.0	-0.22866981982545245	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Foeniculum vulgare	Seed	44.0	6600.0	1.2462875979297328	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Foeniculum vulgare</i>	Fruit	44.0	6600.0	2.750681954647649	--
<i>Gossypium sp</i>	Plant				--
<i>Hypericum perforatum</i>	Plant	0.3	5.4	-1.1319046038135718	--
<i>Hyptis suaveolens</i>	Shoot		2.0	-0.30426951788587125	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of <i>Hyptis suaveolens</i> (L.) Poit. J. Ess. Oil Res. 5: 321.
<i>Hyptis suaveolens</i>	Plant		285.0	0.8167408097904264	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 74.
<i>Hyptis suaveolens</i>	Shoot		2.0	-0.30426951788587125	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of <i>Hyptis suaveolens</i> (L.) Poit. J. Ess. Oil Res. 5: 321.
<i>Hyssopus officinalis</i>	Leaf	5.0	320.0	-0.08738448361690086	--
<i>Hyssopus officinalis</i>	Essential Oil				--
<i>Hyssopus officinalis</i>	Flower	12.0	120.0	-1.0	Flavour and Fragrance Journal, 6: 69.
<i>Illicium verum</i>	Fruit		435.0	-0.35734391683141264	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Juniperus communis</i>	Essential Oil				--
<i>Juniperus communis</i>	Fruit	26.0	300.0	-0.4254028775207352	--
<i>Laurus nobilis</i>	Leaf	0.0	120.0	-0.22922005050208058	--
<i>Laurus nobilis</i>	Leaf Essent. Oil				--
<i>Laurus nobilis</i>	Fruit Essent. Oil		100700.0	1.1856174256264056	--
<i>Lavandula latifolia</i>	Plant	2.0	13.0	-1.0789371319130339	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lepechinia calycina</i>	Plant	30.0	50.0	-0.8210691766077838	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Levisticum officinale</i>	Root	1.0	10.0		--
<i>Lindera benzoin</i>	Leaf		0.1	-0.3142504728497459	--
<i>Lindera benzoin</i>	Fruit	2300.0	3135.0	1.0038352969550377	--
<i>Mangifera indica</i>	Flower				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Melaleuca bracteata	Leaf	120.0	500.0	0.04026752657976088	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Melaleuca alternifolia	Leaf	10.0	50.0	-0.27886249891189346	--
Melaleuca alternifolia	Essential Oil		19000.0	-0.22528390900924156	--
Mentha pulegium	Plant	30.0	60.0	-0.7513751346333919	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Mentha longifolia	Shoot	11.0	70.0	-0.13159795789038686	Planta Medica, 57: A83, 1991.
Mentha pulegium	Essential Oil		3000.0	-0.5349746839055997	--
Mentha x rotundifolia	Leaf	16.0	280.0	-0.1157515969939368	--
Micromeria varia	Shoot		0.0	-0.30934809317985607	Pedro, L.G., et al. 1995. Composition of the Essential oil of Micromeria varia Benth. ssp. thymoides (Sol. ex Lowe) Perez var. thymoides, and endemic species of the Madeira Archipelago. flav. & Fragr. J. 10(3): 199-202.
Micromeria teneriffae	Leaf		20.0	-0.3001378339446704	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Micromeria varia	Shoot	0.0			--
Murraya koenigii	Leaf	23.0	6240.0	4.110948296184419	--
Myrciaria dubia	Fruit				--
Myristica fragrans	Essential Oil	7000.0	16000.0	-0.28335092930230876	--
Myristica fragrans	Leaf Essent. Oil				--
Myristica fragrans	Seed Essent. Oil	4000.0	10000.0	1.1900603576383573	--
Myristica fragrans	Seed	180.0	1440.0	-0.46169629087131775	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myrtus communis	Shoot	1.0	10.0	-0.2839552167099319	--
Nepeta racemosa	Shoot				Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Nepeta racemosa	Shoot		0.1	-0.3090941644151568	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.
Ocimum gratissimum	Plant	10.0	125.0	-0.29836386179984437	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum syriacum	Shoot		12.0	-0.2788766414159471	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum majorana	Plant	18.0	103.0	-0.4516907541435066	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Shoot Essent. Oil		700.0	-0.7133860764771591	--
Origanum syriacum	Shoot		40.0	-0.20777658730015938	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum onites	Shoot		45.0	-0.1950801490651973	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Origanum vulgare	Plant	2.0	244.0	0.5309952376954196	--
Origanum vulgare	Essential Oil		24400.0	-0.12076327248172064	--
Origanum vulgare	Shoot		45.0	-0.1950801490651973	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. Z. Lebensm Unters Forsch 197: 20-23.
Origanum majorana	Essential Oil		26000.0	-0.08979419499208481	--
Origanum syriacum	Shoot		12.0	-0.2788766414159471	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum onites	Shoot		45.0	-0.1950801490651973	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Panax ginseng	Root				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Panax ginseng	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Panax ginseng	Root Essent. Oil				--
Pastinaca sativa	Root				--
Pelargonium graveolens	Essential Oil				--
Pelargonium citrosum	Shoot		22.0	-0.2534837649460229	Matsuda, B. M., et al. 1996. <i>Essential Oil Analysis and Field Evaluation of the Citrosa Plant 'Pelargonium citrosum' as a Repellent Against Populations of Aedes Mosquitoes</i> . <i>J. Am. Mosq. Contr. Assoc.</i> 12(1):69-74.
Perilla frutescens	Shoot Essent. Oil				Nguyen, X. D., La, D. M., Lu'u, D. C., Leclercq, P. A. 1995. <i>Essential Oil Constituents from the Aerial Parts of Perilla frutescens (L.) Britton</i> . <i>J. Essent. Oil Res.</i> , 7(4): 429-432.
Petroselinum crispum	Fruit Essent. Oil	3000.0	7300.0	-1.3339882069903475	--
Petroselinum crispum	Seed	0.6	210.0	-0.868831985294824	--
Petroselinum crispum	Leaf		4.3	-0.31127192594515707	--
Petroselinum crispum	Seed Essent. Oil		1000.0	-1.1132822700487859	--
Peumus boldus	Leaf	0.0	12.0	-0.30581125662007763	--
Pimenta racemosa	Leaf	0.0	950.0	0.35939755207141527	--
Pimenta dioica	Leaf		59.0	-0.2724798984020604	Lawrence, B.M., <i>Essential Oils 1976-1977</i> , <i>Essential Oils 1978</i> , <i>Essential Oils 1979-1980</i> .
Pimenta dioica	Fruit		6.0	-0.5736201696885931	--
Pimenta dioica	Leaf Essent. Oil				--
Pinus sylvestris	Leaf				Guenther, E., <i>The Essential Oils</i> , 6 volumes, D. van Nostrand, New York, 1948-1952.
Pinus mugo	Leaf				Guenther, E., <i>The Essential Oils</i> , 6 volumes, D. van Nostrand, New York, 1948-1952.
Pinus sylvestris	Leaf Essent. Oil				--
Pinus sylvestris	Essential Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Piper auritum	Leaf				Tramil
Piper nigrum	Fruit Essent. Oil	6800.0	36000.0	-0.5597624933275978	--
Piper cubeba	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Piper cubeba	Plant				--
Piper cubeba	Fruit Essent. Oil				--
Piper nigrum	Seed Essent. Oil				--
Porophyllum ruderale	Plant	3.0	4.0	-1.1416617696899867	Loayza, I., de Groot, W., Lorenzo, D. et al. 1999. Composition of the essential oil of Porophyllum ruderale (Jacq.) Cass. from Bolivia. Flav. & Fragr. J. 14: 393-8.
Prunella vulgaris	Plant		280.0	0.7818937888032305	--
Pycnanthemum tenuifolium	Shoot	2.0	420.0	0.7571527185569595	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum curvipes	Shoot				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Rosmarinus eriocalyx	Shoot	44.0	150.0	0.07154505386900671	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus x lavandulaceus	Shoot	13.0	220.0	0.24929518915847595	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Shoot	50.0	125.0	0.008062862694196265	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Resin, Exudate, Sap				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Leaf		6.0	-0.310066323626633	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus eriocalyx	Shoot	44.0	150.0	0.07154505386900671	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus tomentosus	Shoot	0.1	10.0	-0.2839552167099319	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Shoot		50.0	-0.18238371083023522	Tucker, A. O. and Maciarello, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Rosmarinus officinalis	Shoot Essent. Oil		3800.0	-0.7008088432805002	--
Rosmarinus officinalis	Leaf		6.0	-0.310066323626633	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus x mendizabalii	Shoot	4.0	22.0	-0.2534837649460229	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Shoot	19.0	50.0	-0.18238371083023522	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Plant	0.1	133.0	-0.24260862822033083	--
Rosmarinus officinalis	Leaf Essent. Oil		1000.0	-0.8574494059207024	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Salvia dorisiana</i>	Shoot	0.5	2.1	-0.30401558912117194	Tucker, A.O. & Maciarello, M.J. 1994. The Essential Oil of <i>Salvia dorisiana</i> Standley. J. Ess. Oil Res. 6: 97-8.
<i>Salvia canariensis</i>	Leaf		0.1	-0.3142504728497459	Casnigueral,S., Iglesias,J., Vila,R., Virgili,A. and Ibanez,C.1994. The Essential Oil from Leaves of <i>Salvia canariensis</i> L. Flav. & Frag. J. 9:201-204. S. Canigueral, Facultat de Farmacia, Universitat de Barcelona, Ave.Diagonal 643,E-08028, Barcelone Spain
<i>Salvia officinalis</i>	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Salvia officinalis</i>	Essential Oil				--
<i>Salvia officinalis</i>	Leaf Essent. Oil				--
<i>Sassafras albidum</i>	Leaf	1.0	6.1	-0.3099954058431905	--
<i>Sassafras albidum</i>	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Satureja obovata</i>	Leaf		265.0	-0.12638926451032528	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . Phytochemistry 35(1): 83.
<i>Satureja cilicica</i>	Shoot		1.0	-0.30680880553286366	Tumen, G. Baser, K.H.C. and Kirimer, N. 1993. The Essential Oil of <i>Satureja cilicica</i> P.H. Davis. J. Ess. Oil Res. 5: 547-548.
<i>Satureja obovata</i>	Leaf		265.0	-0.12638926451032528	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . Phytochemistry 35(1): 83.
<i>Satureja montana</i>	Plant	1.0	325.0	1.0955169776879943	--
<i>Satureja obovata</i>	Leaf		220.0	-0.15830226705949071	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . Phytochemistry 35(1): 83.
<i>Satureja obovata</i>	Shoot	1.0	30.0	-0.23316946377008357	Fitoterapia No.60: 277.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Satureja thymbra</i>	Shoot		75.0	-0.11890151965542477	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. <i>Z. Lebensm Unters Forsch</i> 197: 20-23.
<i>Satureja obovata</i>	Leaf				Arrebol, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . <i>Phytochemistry</i> 35(1): 83.
<i>Saussurea lappa</i>	Root Essent. Oil				--
<i>Sideritis mugronensis</i>	Leaf	5.0	10.0	-0.3072296122889294	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
<i>Sideritis mugronensis</i>	Flower	35.0	270.0	1.0	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
<i>Sideritis pauli</i>	Shoot		26.0	-0.24332661435805322	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of <i>Sideritis pauli</i> Pau. <i>FFJ</i> : 47-8. 1992.
<i>Tanacetum parthenium</i>	Essential Oil		6000.0	-0.4769076636125325	--
<i>Teucrium asiaticum</i>	Shoot		0.17	-0.3089164142798673	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium oxylepis</i>	Shoot		0.22	-0.30878944989751766	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium salviastrum</i>	Shoot		0.11	-0.3090687715386869	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium scorodonia</i>	Shoot				Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium pseudoscorodonia</i>	Shoot		0.24	-0.3087386641445779	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium oxylepis</i>	Shoot		0.27	-0.3086624855151682	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Thymus capitatus</i>	Shoot		7.0	-0.2915730796509092	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. <i>Flav. & Frag. J.</i> 8: 331-7.
<i>Thymus riatarum</i>	Shoot		25.0	-0.24586590200504566	Iglesias, J., Vila, R., Canigueral, S., Bellakdhar, and II Idrissi, A. 1991. Analysis of the Essential Oil of <i>Thymus riatarum</i> . <i>J. Ess. Oil Res.</i> 3: 43-4.
<i>Thymus capitatus</i>	Plant	1.0	80.0	-0.611987050684608	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Thymus vulgaris</i>	Plant	50.0	425.0	1.7924573974319133	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Thymus vulgaris</i>	Essential Oil		12500.0	-0.35109578631088695	--
<i>Trachyspermum ammi</i>	Plant				--
<i>Trichostemma dichotomum</i>	Shoot		0.6	-0.3078245205916606	Tucker, A.O. and Maciarello, M.J. 1990. The Essential Oil of <i>Trichostemma dichotomum</i> . <i>J. Ess. Oil Res.</i> 2: 149-150.
<i>Tsuga canadensis</i>	Branches				--
<i>Umbellularia californica</i>	Plant	20.0	80.0	-0.611987050684608	--
<i>Zingiber officinale</i>	Rhizome Essent. Oil		4000.0		--
<i>Zingiber officinale</i>	Rhizome	3.0	200.0	-1.0	--